REMARKS

Claims in the case are 1 and 3. No claims have been amended, and no claims have been added herein. Claims 2 and 4-6 were previously cancelled without prejudice in an Amendment dated 29 April 2005.

Claims 1 and 3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over United States Patent No. 5,300,575 (**Jonas et al**) in view of United States Patent No. 4,728,399 (**Moehwald**). This rejection is respectfully traversed in light of the following remarks.

Jonas et al disclose first forming a polythiophene polymer in a dispersion, and then applying the dispersion to a substrate. Jonas et al do not disclose, teach or suggest forming a polythiophene polymer *in situ* by polymerizing 3,4-ethylenedioxythiophene monomers on the surface of the substrate. Jonas et al disclose applying their polythiophene dispersions to substrates including, molded organic plastics, glass and ceramics (column 5, lines 14-23). Jonas et al do not disclose, teach or suggest applying their polythiophene dispersions to metal substrates.

The method of Jonas et al is limited to forming polymers from 3,4-ethylenedioxythiophene monomers. See the abstract, and column 2, lines 12-33 of Jonas et al.

Moehwald discloses forming a conductive polymer *in situ* by polymerizing monomers on the surface of a metal substrate. Moehwald does not disclose, teach or suggest first forming a conductive polymer (e.g., in an aqueous solution), and then applying the preformed conductive polymer to a substrate. Moehwald teaches away from first forming a conductive polymer, and then applying the preformed conductive polymer to a substrate. Moehwald disclose that their process provides for: improved adhesion to the metal substrate; and dispensing with the need to pre-treat the surface of the metal substrate. See column 1, lines 39-45, and column 1, lines 58-61 of Moehwald.

Moehwald discloses forming conductive polymers *in situ* by polymerizing monomers such as 2- or 3-alkylthiophenes, such as 2,3-diethylthiophene. However, Moehwald provides no disclosure, teaching or suggestion with regard to polymerizing 3,4-ethylenedioxythiophene monomers. See column 2, lines 11-32 of Moehwald.

Jonas et al disclose first forming a polythiophene polymer in a dispersion, and then applying the dispersion to a substrate. Jonas et al do not disclose, teach or suggest forming a polythiophene polymer *in situ* by polymerizing 3,4-ethylenedioxythiophene monomers on the surface of the substrate. Moehwald discloses forming a conductive polymer *in situ* by polymerizing monomers on the surface of a metal substrate. Moehwald does not disclose, teach or suggest first forming a conductive polymer (e.g., in an aqueous solution), and then applying the preformed conductive polymer to a substrate.

The process of Jonas et al is limited to forming polymers from 3,4-ethylene-dioxythiophene monomers. Jonas et al provide no disclosure, teaching or suggestion with regard to performing their process with other thiophene monomers, such as 2- or 3-alkylthiophenes. Moehwald discloses forming conductive polymers *in situ* by polymerizing monomers such as 2- or 3-alkylthiophenes, such as 2,3-diethylthiophene. Moehwald, however, provides no disclosure, teaching or suggestion with regard to polymerizing 3,4-ethylenedioxythiophene monomers.

Jonas et al and Moehwald, either alone or in combination, do not provide the requisite disclosure that would motivate a skilled artisan to select peroxodisulfuric acid over other oxidizing agents. Moehwald at column 3, lines 3-12 disclose a number of oxidizing agents, including "peroxodisulfuric acid and its alkali metal and ammonium salts," but provide no further disclosure or suggestion as to selecting peroxodisulfuric acid over the other recited oxidizing agents. In the examples of Moehwald, the oxidizing agent used is sodium persulfate (column 4, lines 39-60). Jonas et al disclose the use of "alkali or ammonium persulfates" (column 3, lines 55-56).

In particular, Jonas et al and Moehwald, either alone or in combination, provide no disclosure, teaching or suggestion as to the unexpectedly improved physical properties that are provided by thin films prepared from aqueous

dispersions of poly(3,4-ethelenedioxythiophenes) that are prepared by using peroxodisulfuric acid rather than peroxodisulfate salts as the oxidizing agent. Attention is directed to the examples of the present specification in which thin films prepared from dispersions according to Applicants' claimed method (i.e., using peroxodisulfuric acid as the oxidizing agent) provide an unexpected and desirable combination of higher light transmission values coupled with lower surface resistivity values (i.e., higher surface conductivities) relative to those of the comparative examples, which were prepared using sodium peroxodisulfate. See Table 1 on page 18 of the specification.

In light of the preceding remarks, neither Jonas et al nor Moehwald provide the requisite disclosure that would motivate a skilled artisan to combine or otherwise modify their respective disclosures to arrive at Applicants' claimed method. As the Court of Appeals for the Federal Circuit has stated, there are three possible sources for motivation to combine references in a manner that would render claims obvious. These are: (1) the nature of the problem to be solved; (2) the teaching of the prior art; and (3) the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). The nature of the problem to be solved and the knowledge of persons of ordinary skill in the art are not present here and have not been relied upon in the rejection. As for the teaching of the prior art, the above discussion has established that neither of the patents relied upon in the rejection provide the requisite teaching, and certainly do not provide the motivation or suggestion to combine that is required by Court decisions.

It is respectfully submitted that the rejection impermissibly uses Applicants' application as a blueprint for selecting and combining or modifying the cited references to arrive at Applicants' claimed invention, thereby making use of prohibited hindsight in the selection and application of the cited references. The use of hindsight reconstruction of an invention is an illogical and inappropriate process by which to determine patentability. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1457 (Fed. Cir. 1998). Modifying "prior art references without evidence of such a suggestion, teaching or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability -- the essence of hindsight." *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999).

In light of the preceding remarks, Applicants' claims are deemed to be unobvious and patentable over Jonas et al in view of Moehwald. Reconsideration and withdrawal of the present rejection is respectfully requested.

In light of the amendments herein and the preceding remarks, Applicants' presently pending claims are deemed to define an invention that is unanticipated, unovbious and hence, patentable. Reconsideration of the rejections and allowance of all of the presently pending claims is respectfully requested.

Respectfully submitted,

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